

REMARKS

In the Office Action dated December 28, 2004, the Examiner objected to the disclosure, objected to Figures 3 and 4, objected to claims 1, 7 and 9 for lacking antecedent basis, objected to claims 4-6 for being in improper form, and rejected Claims 1-3 and 7-9. Applicant has submitted a replacement drawing, amended the specification, and amended Claims 1-9. Applicant has added new claims 10-13. No new matter has been entered as a result of this amendment. Claims 1-13 are pending after entry of this amendment.

Specification

Applicants have amended the disclosure as required by the Examiner, adding the appropriate headings and amending paragraphs 46 and 52. Applicants note that the Examiner requested that paragraph 51 be amended. However, the subject matter to be changed appears in paragraph 52. It should be noted that Applicants respectfully believe that the Examiner may have made a typographical error, and Applicants have amended paragraph 52 with the requested change.

Drawings

The drawings have been changed to reflect the addition of a Local Area Network or LAN with reference number 306 in Figure 3 and to change the reference number --411--on Product 1' to --414-- as required by the Examiner. A replacement sheet with these changes has been attached to this amendment.

Claims

I. Objection of Claims Due To Informalities

Examiner objected to claims 1, 7 and 8 because of the improper antecedent basis for "the hierarchical level," "the object data record" and "the stored limit values." Claims 1, 7 and 8 have been amended, correcting the antecedent basis for the above phrases. The amending of these claims has not changed the scope of the subject matter related to patentability. Applicants, respectfully request the objection be withdrawn.

Claims 4-6 were objected to under 37 C.F.R. § 1.75(c) as being in improper form because a multiple dependent claim cannot depend from any other multiple dependent claim. Claims 4-6 have been amended removing the multiple dependency. The amending of these claims has not changed the scope of the subject matter related to patentability. Applicants respectfully request that the objection be withdrawn.

IV. Rejection of Claims 1, 3-9 under 35 USC § 103(a)

Claims 1, 7-9 are rejected under 35 USC § 103(a) as being unpatentable over Chen et al. (US Patent No. 5,726,920) in view of Pellegrini et al. (US Patent No. 6,700,950).

Claims 1, 7-9 recites a method, a device that executes a method, and a computer programmable medium that has a method for monitoring process parameters of a manufacturing process of a physical object with the following steps. The method includes storing an unspecific value for a hierarchical level, storing process data from at least one process parameter for a corresponding object data record, comparing the stored process data with a stored limit value for the corresponding object data record having a specific value, and iteratively processing the hierarchical levels of the object data record with the stored process data from a highest hierarchical level to the next lower hierarchical level. The object data record having a specific value has object data identifying a logistical level of the physical object and the logistical level has a limit value for at least one process parameter.

Chen teaches a data collection means that collects data that can be compared with historical data, comparing the collected data with historical data to determine out-of-range conditions. The Examiner correctly points out that Chen does not teach or disclose a storing of an unspecific value for a hierarchical level. Chen also does not teach the iterative processing of the hierarchical levels for comparing the limit values to the stored processed data.

Pellegrini teaches using wildcard data in a query for criteria in a system for controlling error. Each hierarchy level is processed to get the criteria (or data corresponding to the criteria) residing in the hierarchy. If the data that meets the criteria is not retrieved after querying, the user may specify that the next process system criteria may be eliminated. See Col. 8, ll. 63-67.

In order to establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine the reference teachings. Second, there must be a reasonable expectation of success. Finally, the reference or references must teach or suggest all of the claim limitations. MPEP§706.02(j). Contrary to the Examiner's assertion, the combination of Chen and Pellegrini do not teach all of the claim limitations.

At the very least, all of the rejected claims include the step of storing an unspecific value for a hierarchical level if no specific value is stored in an object data record. The unspecific value means that a limit value is not stored for the object data record for that hierarchical level. Further, an unspecific value means that the hierarchical level will not be processed because a comparison only occurs if the object data record has a specified value. The references of Chen and Pellegrini do not teach or disclose, either alone or in combination, the storing of the unspecific values for a hierarchical level prior to processing.

Pellegrini teaches a querying or processing of the hierarchical level and if the data is not retrieved then the next process criteria may be eliminated. Pellegrini actually teaches away from the method of claim 1. Claim 1 recites the storing of an unspecific value when no specific value is stored in an object record, thus the stored process data will not be compared with the limit value of that object record and the method automatically skips and goes to the next step. Pellegrini first queries the hierarchical level for the data points, and when they are not retrieved, the user may then specify that the next process step may be eliminated. See col. 8, ll. 63-67. Thus, Pellegrini teaches away from the method of claim 1. As the Examiner states, Chen does not teach or disclose a storing of an unspecific value for a hierarchical level. The Applicants, therefore, respectfully request that the Examiner withdraw his rejection of claims 1, 7-9 which contain patentable limitations not suggested, or made obvious, by Chen alone or in combination with Pellegrini.

New claims 10-13 have been added. No new matter has been entered as a result of adding these new claims.

In view of the response above, Applicants respectfully submit that all of the pending claims are in condition for allowance, as well as the application, and seek an early allowance thereof.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Stephen Charles Smith", written over a horizontal line.

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Amendment To The Drawing

A corrected replacement sheet in compliance with 37 C.F.R. § 1.121(d) is attached to this amendment with the required changes.

1. Reference sign 306 referring to a Local Area Network ("LAN") has been added to Figure 3.
2. The reference number "411" referring to "product 1' " has been changed to reference number "414."